

What is claimed is:

1. A power transmitting apparatus comprising:

a vertical input shaft;

5 a sun gear provided on a lower portion of said input shaft;

a plurality of planetary gears meshing with said sun gear;

a flat gear support member disposed under said planetary gears
for rotatably supporting thereon said planetary gears;

10 an output shaft extending downward from said gear support
member in axial alignment with said input shaft;

a ring gear surrounding said planetary gears;

a casing surrounding said ring gear, planetary gears, gear
support member and sun gear, said ring gear being rotatably mounted
on said casing, lubricating oil being stored to a predetermined
15 level in said casing; and

a brake unit interposed between said casing and said ring
gear for braking said ring gear, wherein, when said brake unit
is in a braking state, power input via said input shaft is transmitted
to said output shaft with a reduced speed, while, when said ring
20 gear is in a non-braking state to allow said ring gear to run idle,
the power input via said input shaft is prevented from being
transmitted to said output shaft,

wherein said flat gear support member has an outer diameter
greater than a pitch circle of said ring gear, and the lubricating
25 oil stored in said casing has a surface level set below said ring
gear but above said gear support member.

2. A power transmitting apparatus as claimed in claim 1 wherein said gear support member has a hole for scattering the lubricating oil onto teeth of said planetary gears and/or said ring gear.

5 3. A power transmitting apparatus as claimed in claim 1 which further comprises a resilient clip resiliently fitted on one of said output shaft and said gear support member, and said resilient clip has at least one end supported by said casing so that, when said brake unit is in the non-braking state, frictional resistance
10 to said output shaft can be increased via said resilient clip.

4. A power transmitting apparatus as claimed in claim 3 wherein said casing has, on a bottom thereof, a frictional surface for sliding contact with a lower surface of said gear support member.

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5. A power transmitting apparatus as claimed in claim 1 wherein said gear support member has a shape of a disk.